Looking at Language Like a Scientist: Linguistics in the Classroom

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Your presenters:

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Serious inquiry begins when we are willing to be surprised by simple phenomena of nature, such as the fact that an apple falls from a tree, or a phrase means what it does.

Chomsky
What about language can surprise us?
Goal for the day:

To see how language is a system of patterns that can be explored in a scientific way.

Helps develop a sense of inquiry

Supports the same kind of thinking that is needed for math and science
Yaqui is an American Indian language currently spoken by about 16,400 people in Northern Mexico and southern Arizona.

The following are eight emphatic sentences in the Yaqui language. Your task is to match the correct English translations, given below in random order, to each Yaqui sentence.

- _Inepo sitka._  
  a. You helped me.
- _Empo nee aniak._  
  b. You danced.
- _Inepo apo’ik aniak._  
  c. I saw you.
- _Inepo apo’ik vichak._  
  d. I saw him.
- _Inepo enchi vichak._  
  e. I helped you.
- _Inepo enchi aniak._  
  f. I helped him.
- _Empo ye’ek._  
  g. He saw you.
- _Aapo enchi vichak._  
  h. I left.

*Problem by Tom Payne.*
What did you notice?

What did you wonder?
What do you notice or wonder?

I have a cup of pebbles. 👍
I have a cup of pebble. 🙅👎

I have a cup of gravels. 🙅👎
I have a cup of gravel. 👍

Unzip 👍
Uncover 👍
Unbutton 👍

Uneat 👎
Undrink 👎
Unbreak 👎

Red - Redden 👍
Black - Blacken 👍
Purple - Purplen 👎
Blue - Bluen 👎
A Scientific Approach to Understanding Language

If the Yaqui sentence included “empo”, then it must translate to “you” in English.

If you add prefix un- to a verb in English, then you get the opposite meaning.
A “Scientific” Approach to Understand Language

1. Test Hypothesis
2. Rule Confirmed!
3. Rule Disproved
4. Adapt or Change Hypothesis
Jabberwocky

How can you tell parts of speech when you don't know the meaning of the words?
Jabberwocky

'Twas brillig, and the slithy toves
Did gyre and gimble in the wabe:
All mimsy were the borogoves,
And the mome raths outgrabe.
Harry Potter Spells

Student Version
Is scientific thinking different from the thinking that takes place in the humanities/language arts classroom?
Thanks!

Any questions?
Exit Card